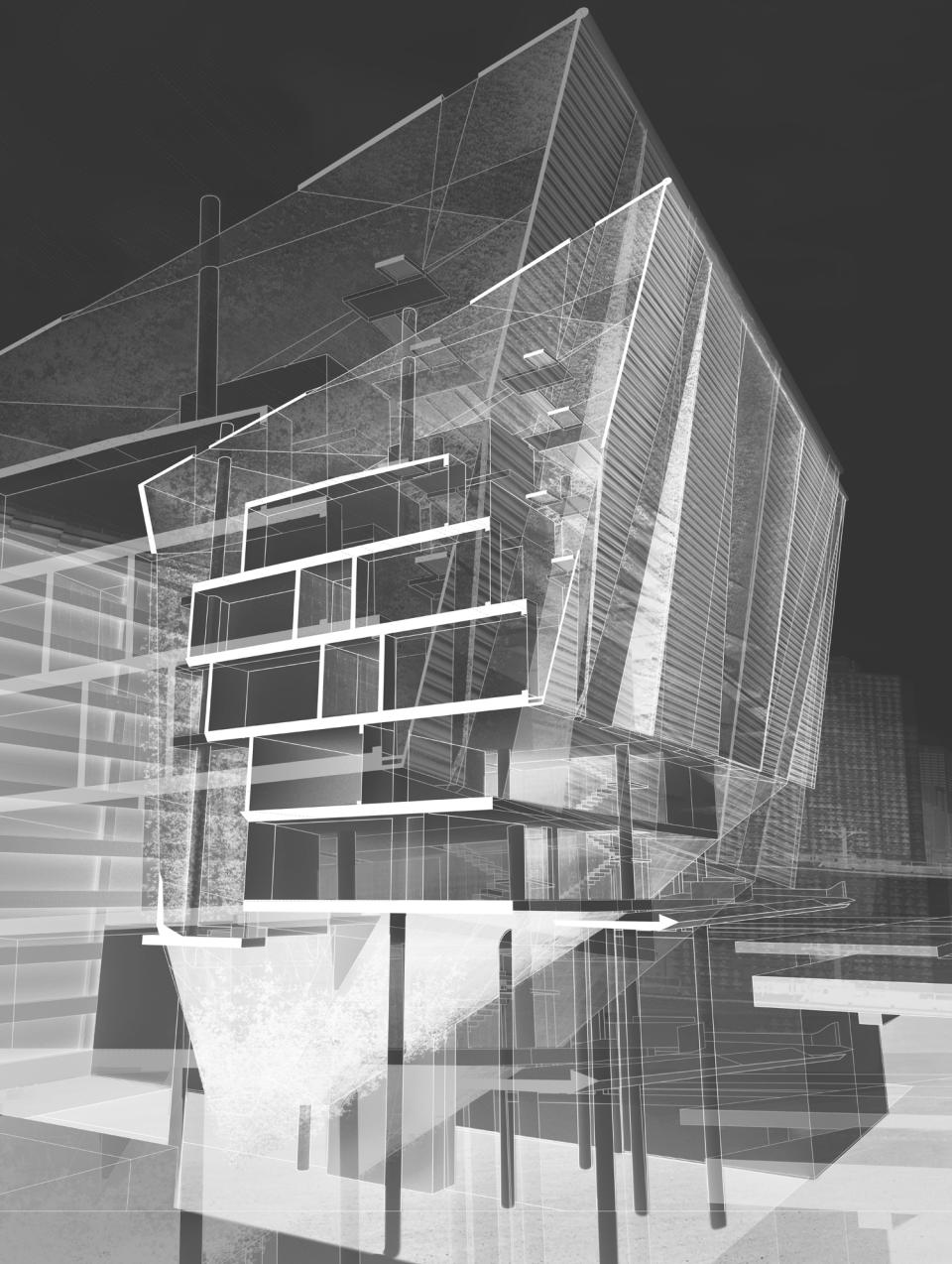
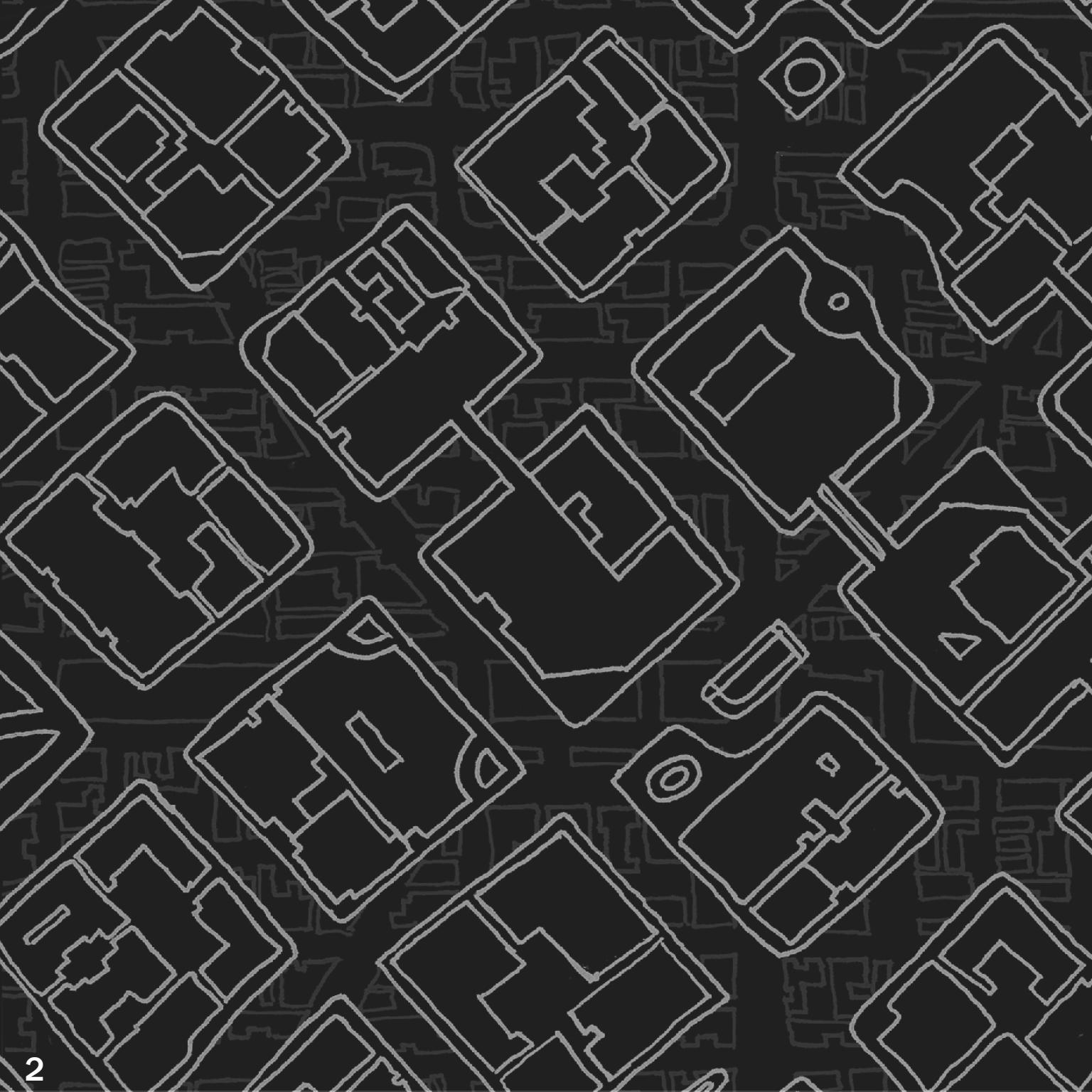


ARCHITECTURAL  
DESIGN  
PORTFOLIO

NATHANIEL  
HAMMITT



UNIVERSITY OF PENNSYLVANIA  
MASTERS OF ARCHITECTURE  
M.S. HISTORIC PRESERVATION





6

10x10

PROFESSIONAL

10

WPRC

12

Healthscape

16

streetcar

COMPETITION

18

broadmoor

20

drylands

24

greenhills

ACADEMIC

26

literacy center

28

sketches

30

CV

PERSONAL





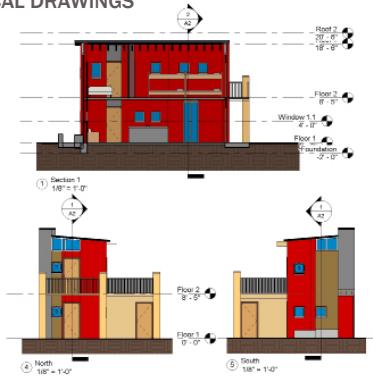
EXTERIOR PERSPECTIVE



EXTERIOR PERSPECTIVE



TECHNICAL DRAWINGS



PERSPECTIVE VIEW

from street with proposed context



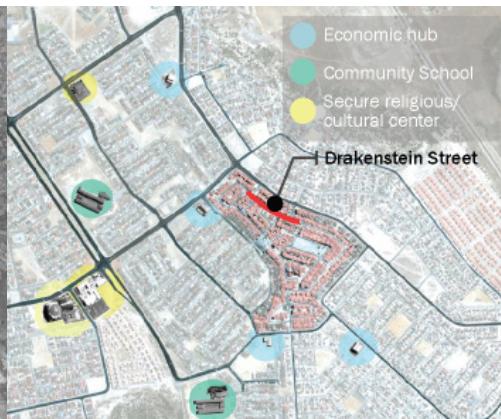
SECTION DIAGRAM through main community street

research: analysis of 10x10 DesignIndaba, constructed summer 2010 by DesignSpaceAfrica  
utilize Revit BIM technology to re-create digital model of existing conditions with urban design improvements  
research utilized by DesignSpaceAfrica

ROLE  
METHOD  
STATUS



PROMPT identify a street in the greater Cape Town region and suggest a viable strategy for its improvement



street drakenstein street

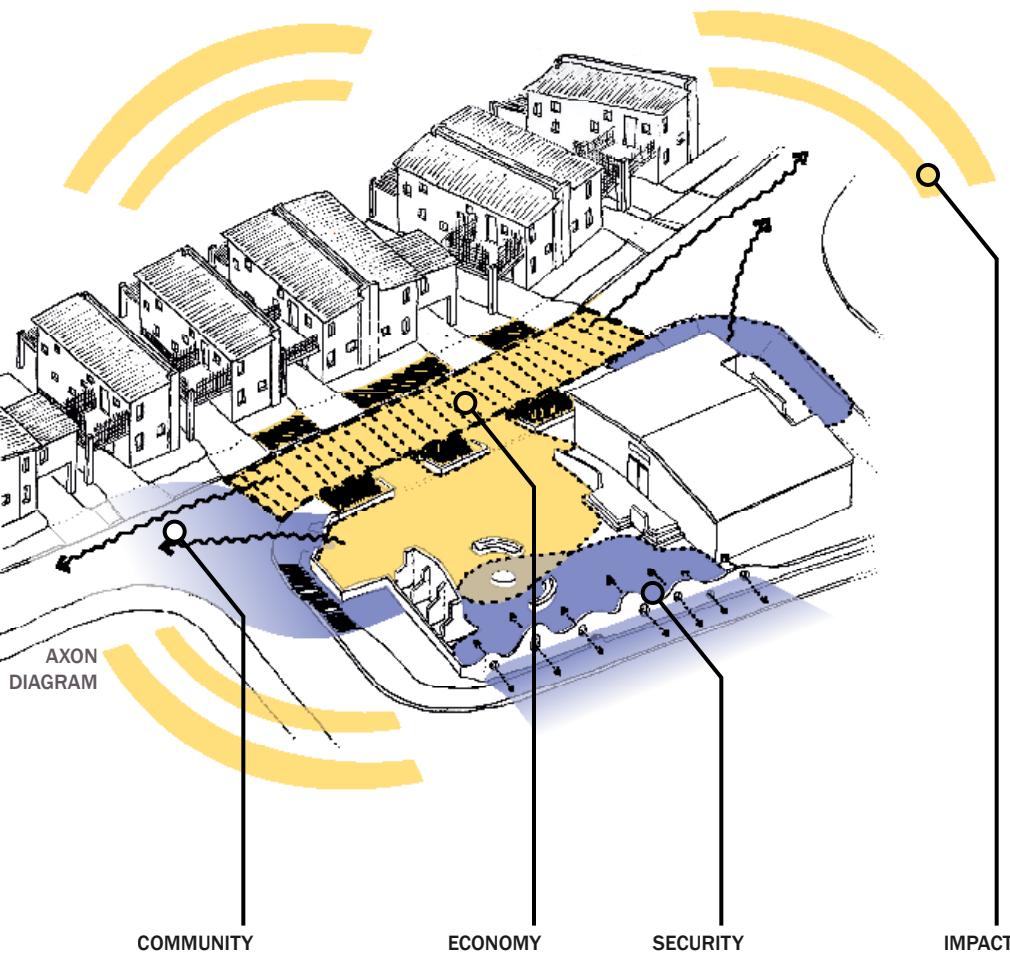
**community needs** improved community connections  
 increased economic opportunities  
 enhanced protection and security



**obstacle** drakenstein street is located far from Cape Town's economic hub, lacks a strong infrastructure community connections, and is unsafe for the many Cape families in the neighborhood

**strategy** employ the community

drakenstein street streetscape can be improved by enhancing the existing DesignIndaba 10x10 homes to advance the three deficient community characteristics: security, community, and economy



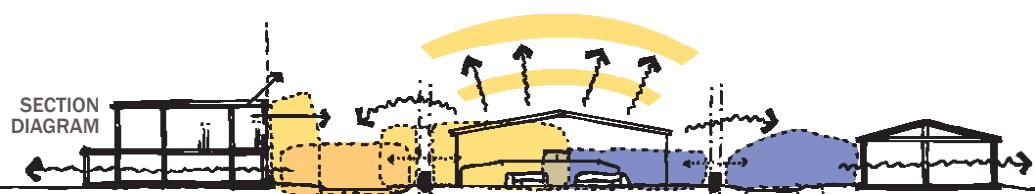
**community**  
modified with shaded outdoor areas to promote safe and positive community connections

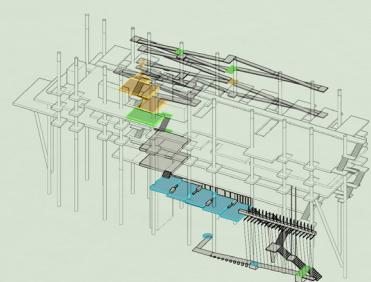
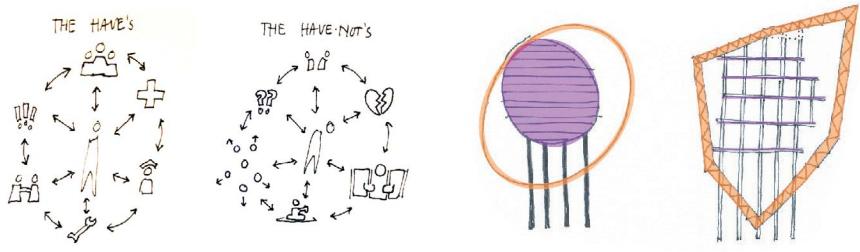
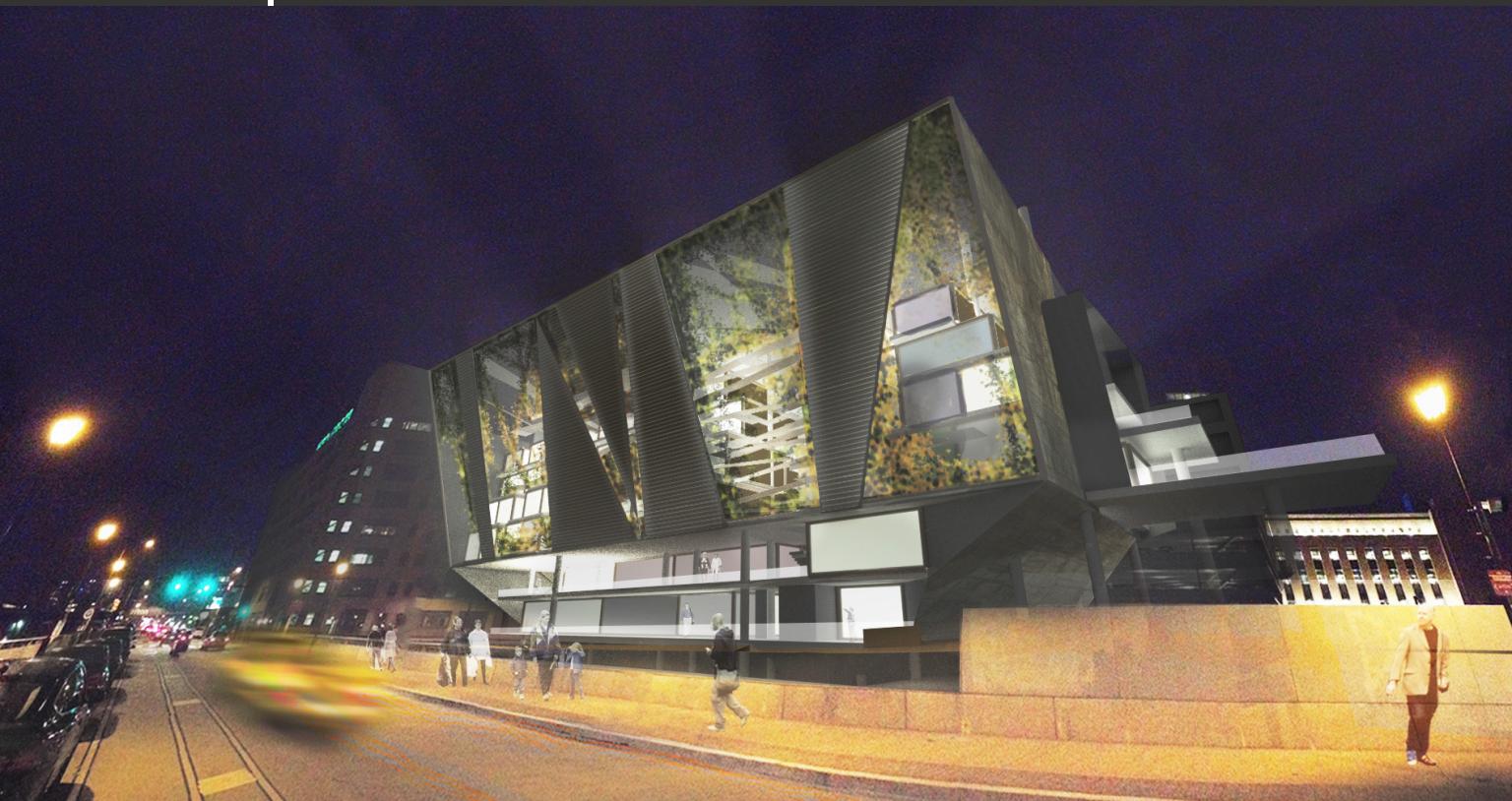


**economy**  
modified to provide economic income: outdoor sales booth and additional upstairs room for rent



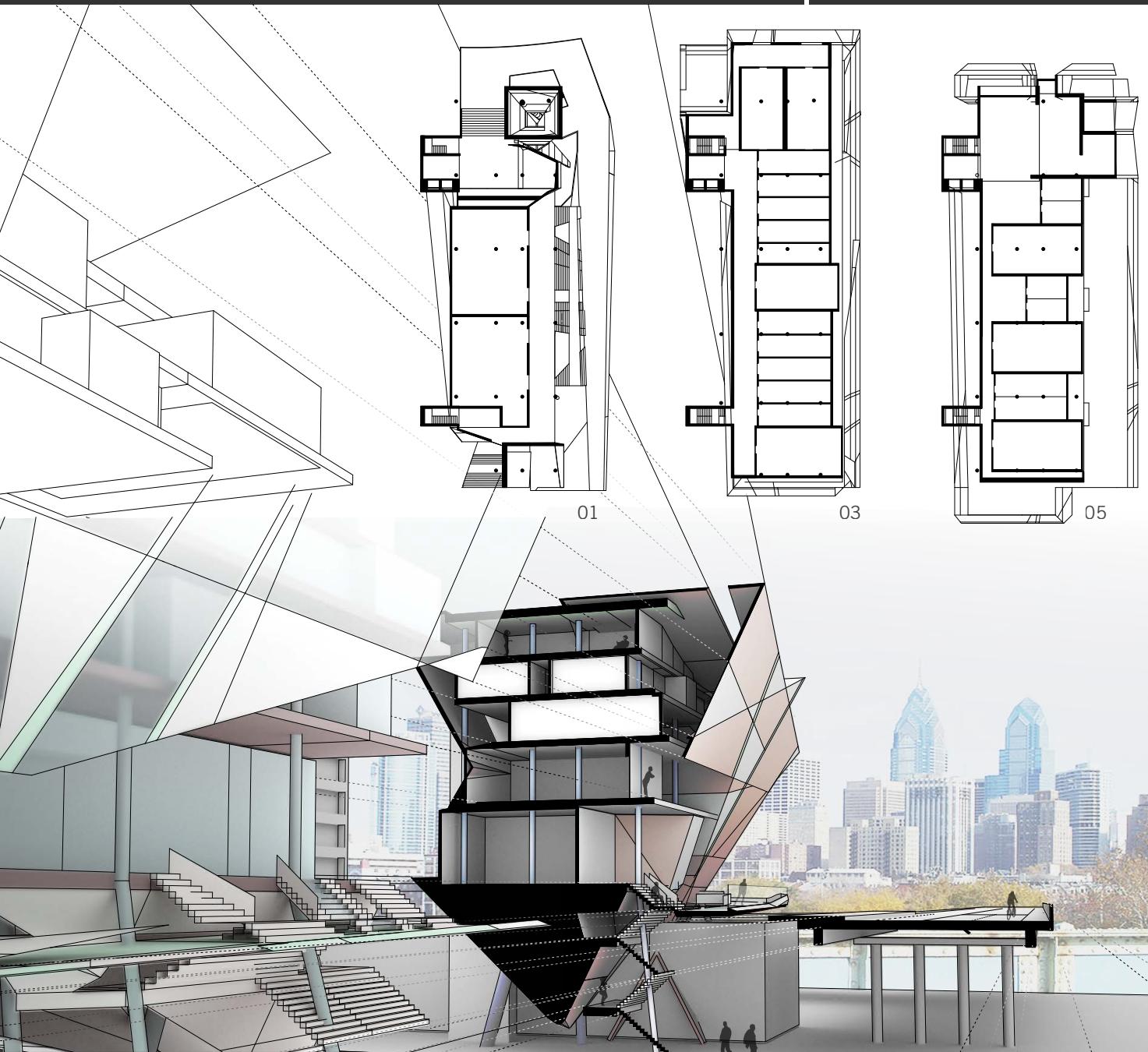
**security**  
modified with rods and metal to ensure security for children and families





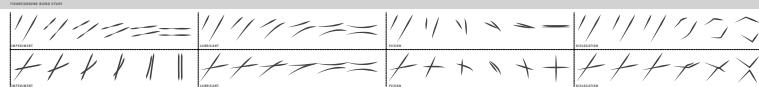
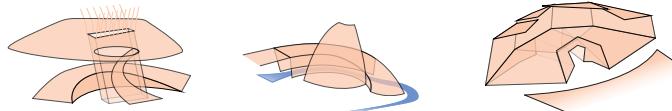
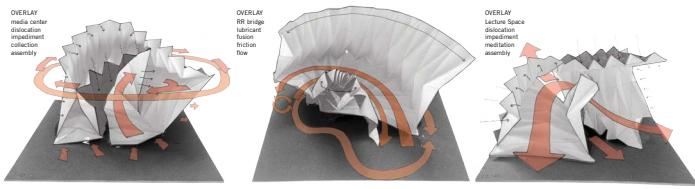
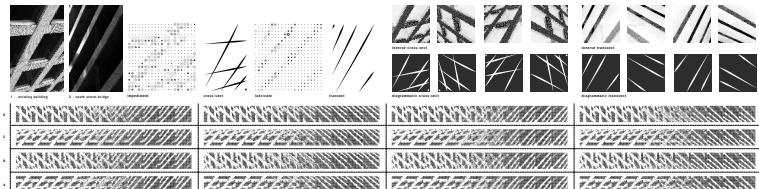
**context** West Philadelphia is home to the homeless and to a large student population. The WPRC is meant to bring these two groups together in one housing system that integrated the upper and lower class.

**approach** analysis of urban site, considerations for the social context, and proposal of a building that created a unique urban condition for both user groups



# Healthscape

PUBLIC HEALTH CENTER IN SOUTHWEST PHILADELPHIA  
PENNDISIGN/UNIVERSITY OF PENNSYLVANIA  
SPRING 2013



WELLNESS REGIONS



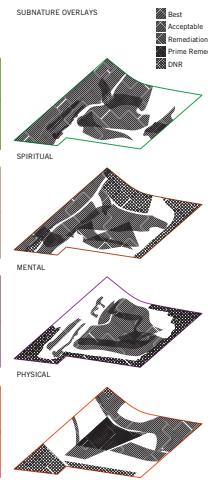
PROGRAM

sensory insulation  
doctor office  
exam rooms  
outpatient  
health education  
conference space  
lecture space  
open plaza  
public restaurant  
shared work space  
offices  
media center  
classrooms  
misc. education  
gallery  
counseling  
therapy  
water space  
park  
sports  
meditation space  
central lobby  
kitchen  
market exchange  
administration  
railroad bridge  
sensory insulation

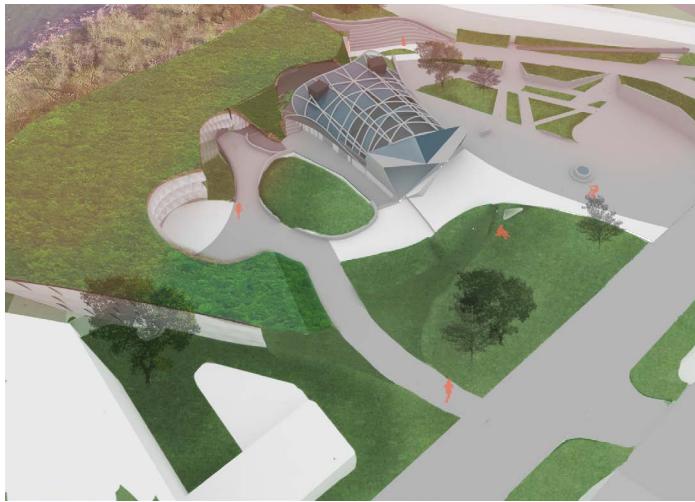
RELEVANT WELLNESS

spiritual insulation  
doctor office  
exam rooms  
outpatient  
health education  
conference space  
lecture space  
open plaza  
public restaurant  
shared work space  
offices  
media center  
classrooms  
misc. education  
gallery  
counseling  
therapy  
water space  
park  
sports  
meditation space  
central lobby  
kitchen  
market exchange  
administration  
railroad bridge  
sensory insulation

SUBNATURE OVERLAYS



- Rest
- Acceptable
- Remediation
- Prime Remed.
- BNR

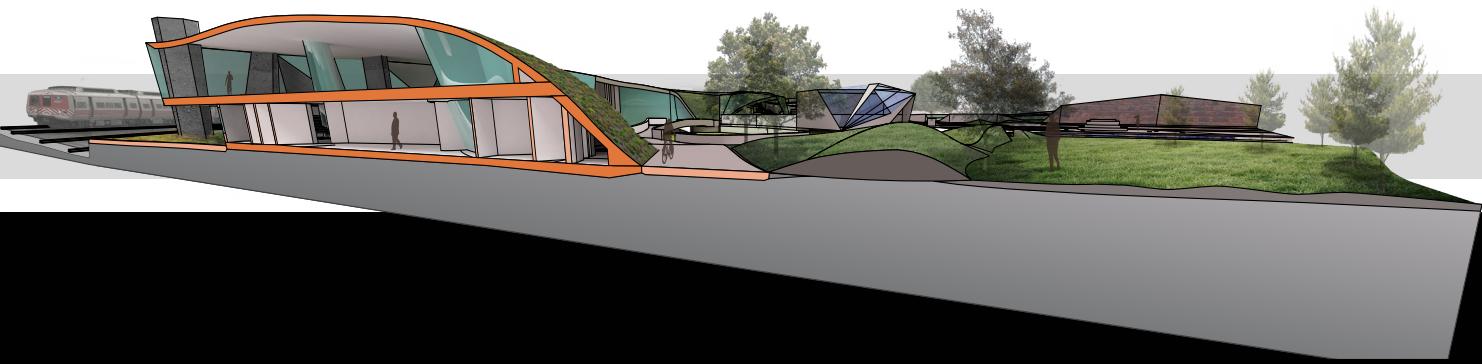
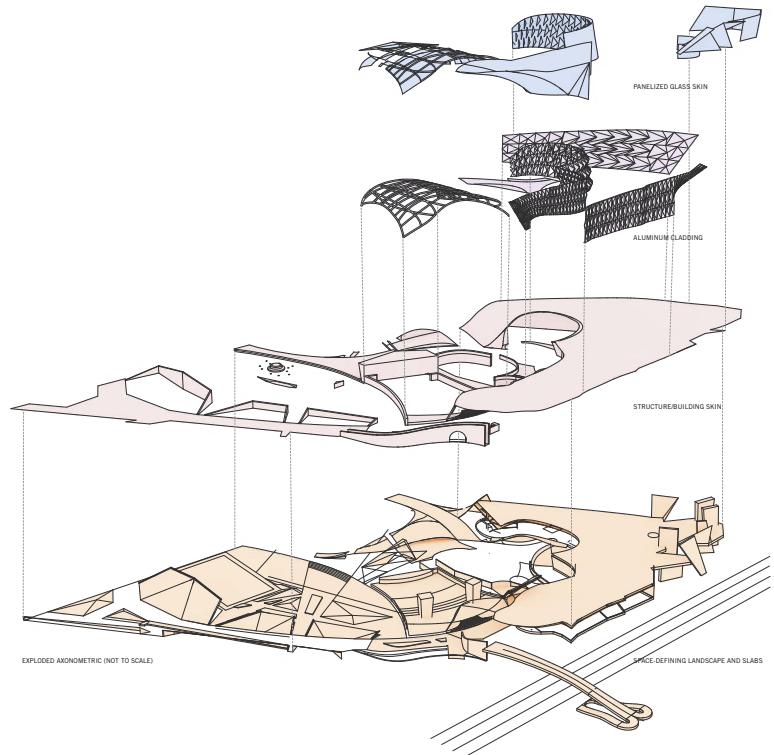
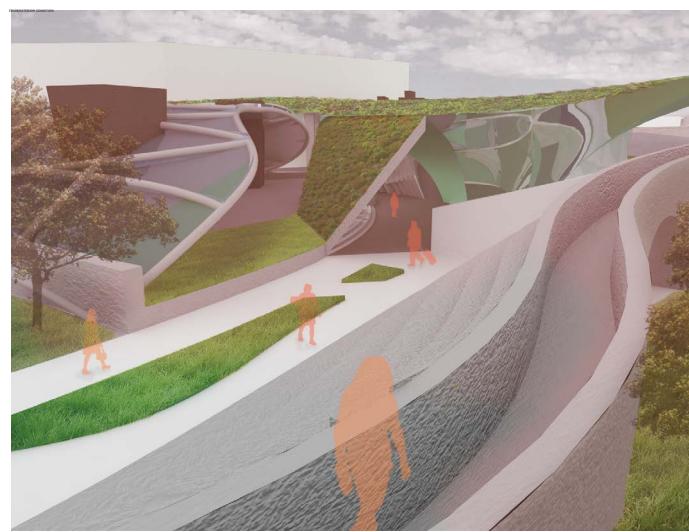


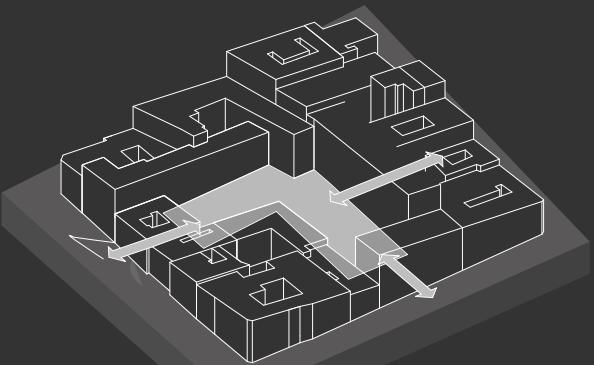
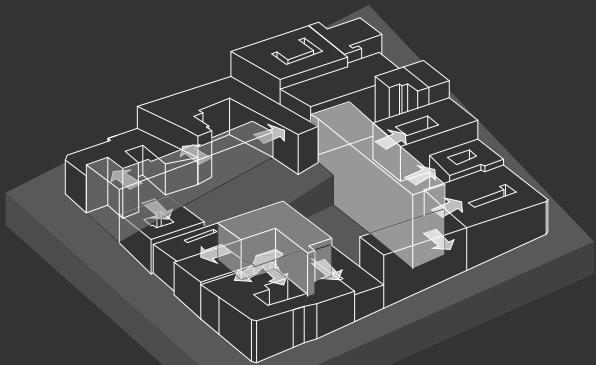
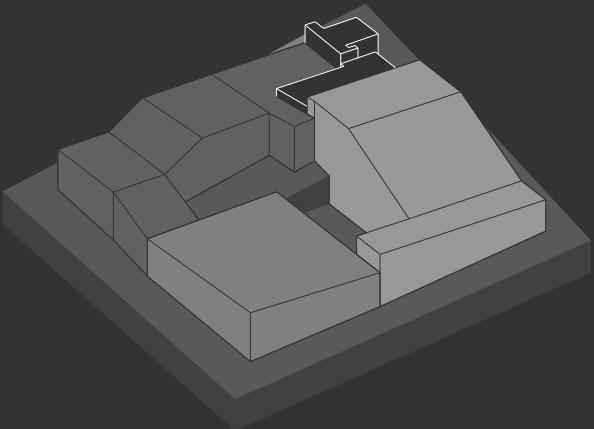
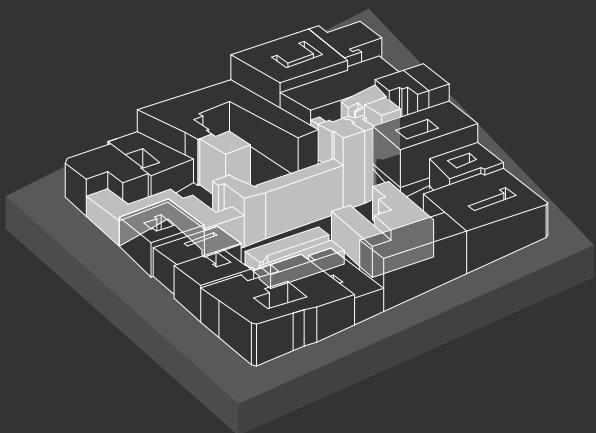
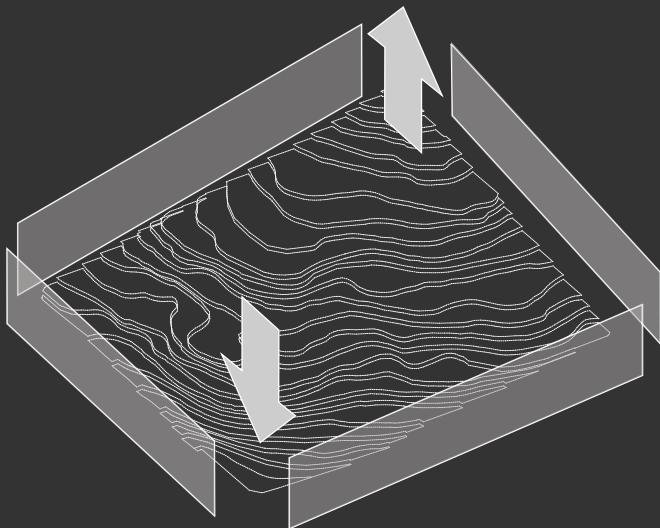
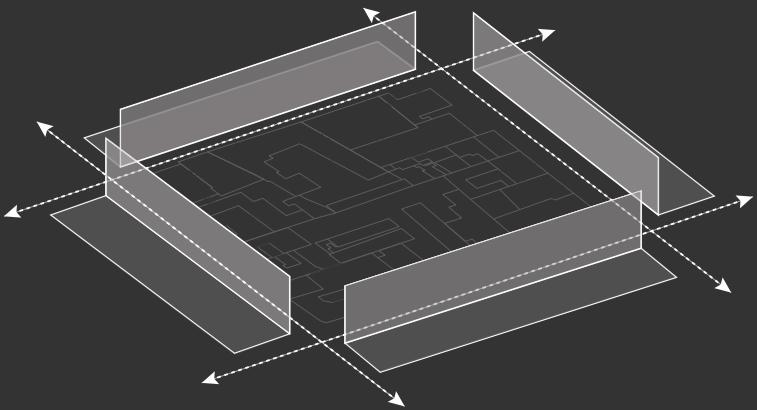
URBAN CONTEXT PERSPECTIVE

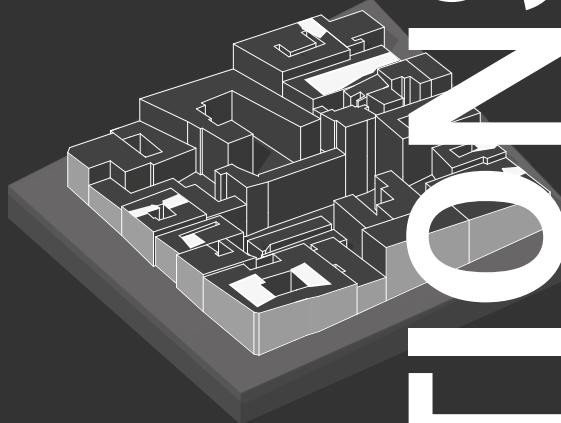


*Analysis of public health in Philadelphia. Concept development for public health center*  
Paper models, Illustrator, Rhino, Grasshopper, Photoshop  
BUilding submitted for consideration

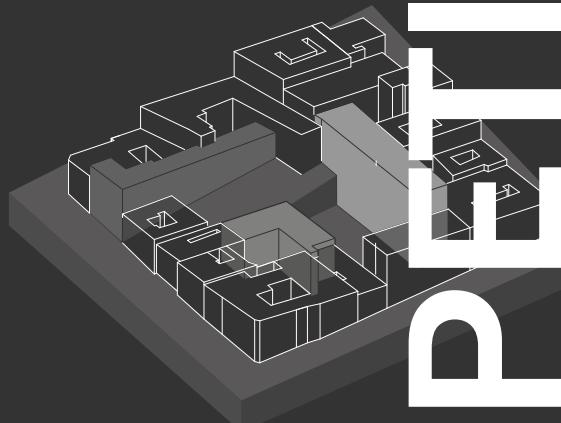
ROLE  
METHOD  
STATUS







S



M



T



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C



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W

# streetcar

USGBC EMERGING PROFESSIONALS CINCINNATI STREETCAR STATION DESIGN COMPETITION  
INDIVIDUAL ENTRY- CINCINNATI USA  
FALL 2011 - RUNNER UP IN POOL OF 14 INTERNATIONAL ENTRIES



context: Over-the-Rhine, a Cincinnati neighborhood rich in architectural history with a large collection of structurally progressive 19th century Italianate buildings



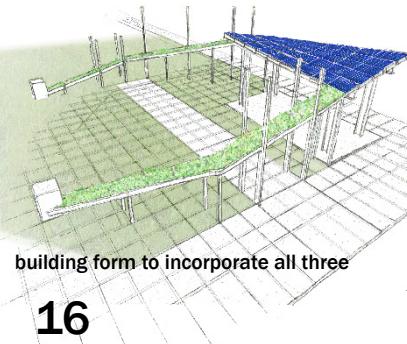
utilize solar collection technology



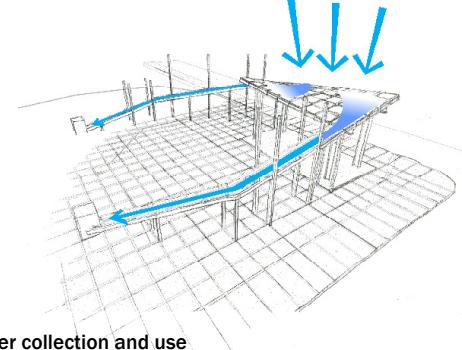
permeable surfaces connect with park



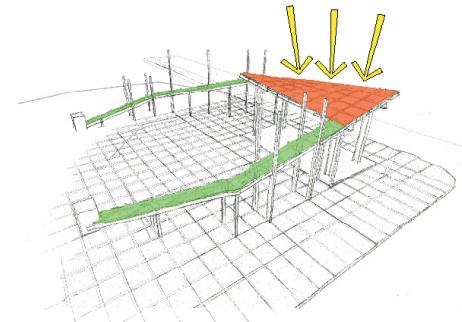
local vegetation to utilize water runoff



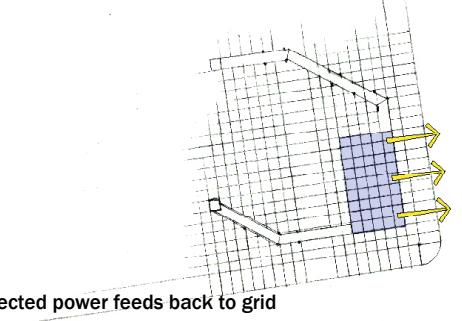
building form to incorporate all three



water collection and use



solar collection from roof



collected power feeds back to grid

# streetcar

*self-driven competition entry*

*hand skills, photography, technical drawing in CAD+Revit, Adobe CS3  
competition runner-up; select design features adopted for stations currently under construction*



**Findlay Market**



**Government Square**



**Public Library**



**Freedom Center**



**Music Hall**



**Washington Park**



**Court House**



**University Plaza**



**Fountain Square**



**Cincinnati Streetcar**

Cincinnati USGBC Emerging Professionals hosted this design competition to generate architectural proposals for the new Cincinnati Streetcar system.

This design, which placed 2nd overall from a pool of 13 international entries, uses solar, material, and ecological design considerations in an aesthetically appealing form to integrate the new station within its urban context

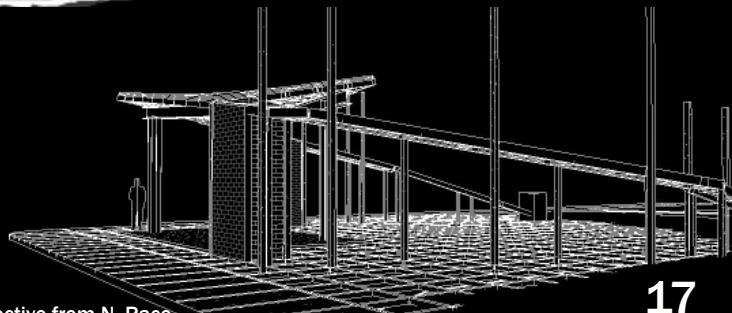
graphics generated for various stations on Cincinnati Streetcar line



*perspective from corner of 12th/Race*



*perspective from W. 12th*



*perspective from N. Race*

# broadmoor



USGBC NATURAL TALENT DESIGN COMPETITION: BROADMOOR, NEW ORLEANS  
COLLABORATIVE COMPETITION- CINCINNATI/NEW ORLEANS, USA  
WINTER/SPRING 2009

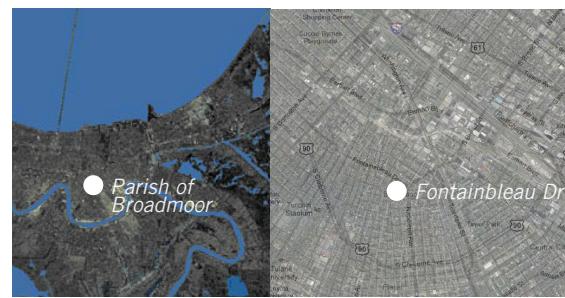


Putting design talent to use, I worked with one other student to organize a 5-student, architecture design team for the 2010 United States Green Building Council Natural Talent Design Competition

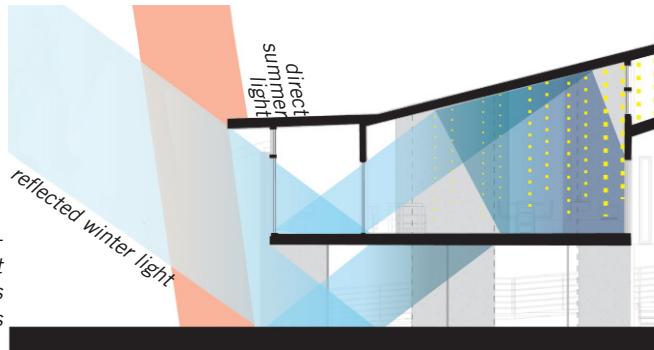
We traveled to New Orleans and assisted with a building project before developing a design proposal for our collaborative competition entry, which received honorable mention in our regional USGBC chapter



as a team we traveled to New Orleans and assisted with design work for a home whose foundation had been raised 7 feet above ground following extensive flooding during Hurricane Katrina



Solar exposure diagram - direct light is blocked, but reflected light illuminates interior spaces



LEED: project garnered points to merit LEED Gold certification

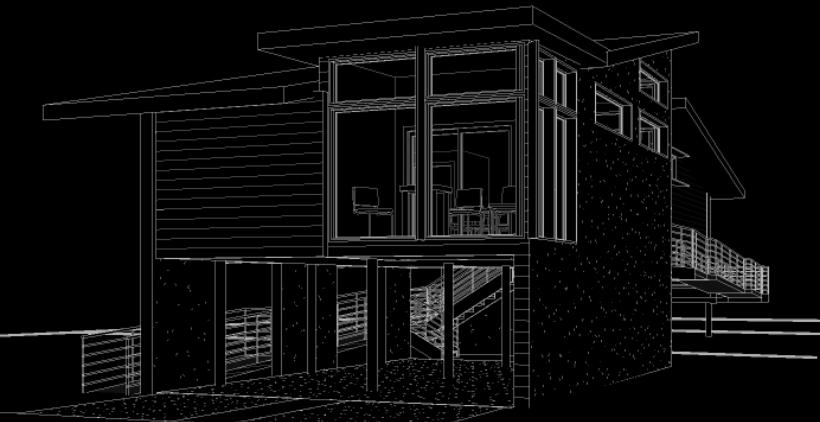


programmed spaces are elevated 7ft above grade, and separated into public/private zones

# broadmoor

5-student team design co-leader  
organizing LEED research and Revit BIM design development  
regional chapter honorable mention

ROLE  
METHOD  
STATUS

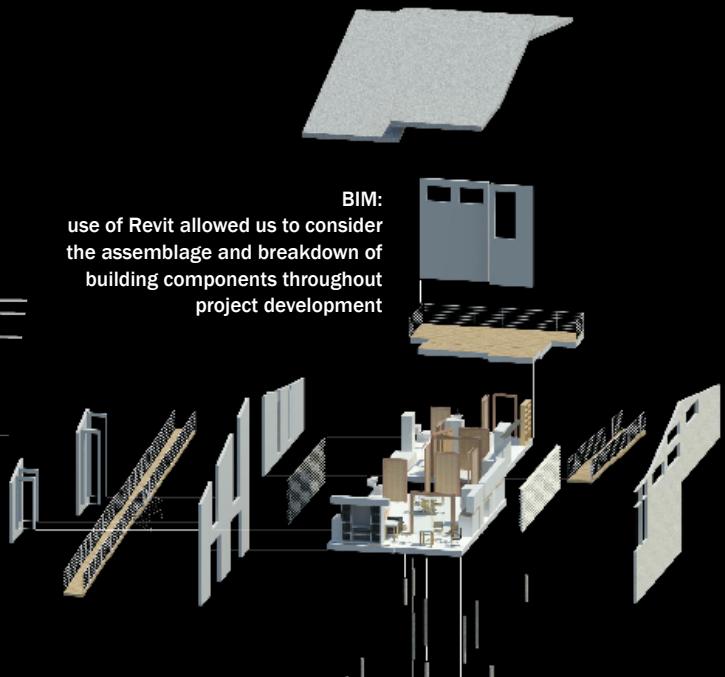


Street perspective, rendered to illustrate minimized solar exposure and open space below elevated neo-shotgun structure

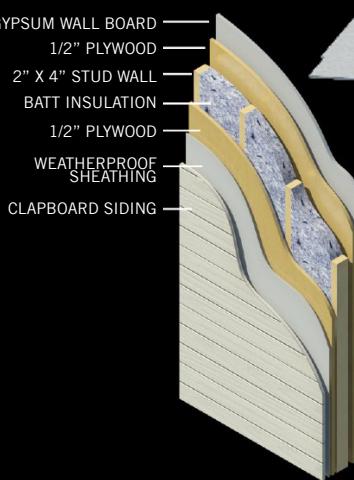


side elevation, showing extensive ramp surface and separation of front (public) and rear (private) program areas

BIM:  
use of Revit allowed us to consider the assemblage and breakdown of building components throughout project development



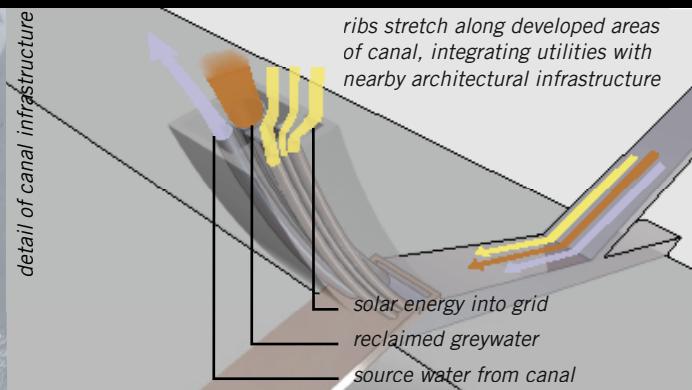
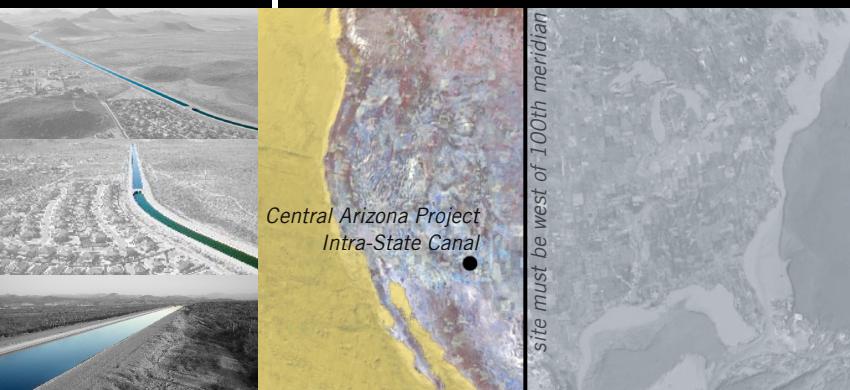
1/2" GYPSUM WALL BOARD  
1/2" PLYWOOD  
2" X 4" STUD WALL  
BATT INSULATION  
1/2" PLYWOOD  
WEATHERPROOF SHEATHING  
CLAPBOARD SIDING



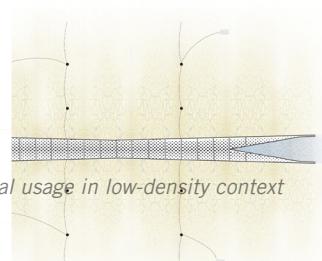
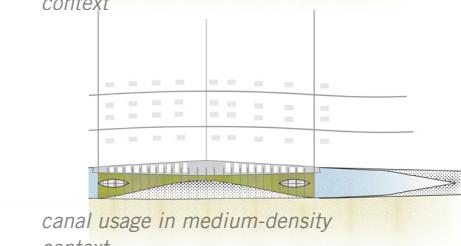
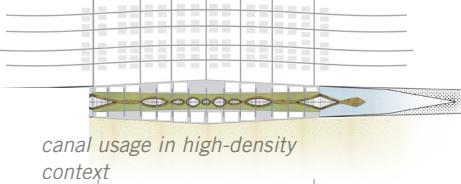
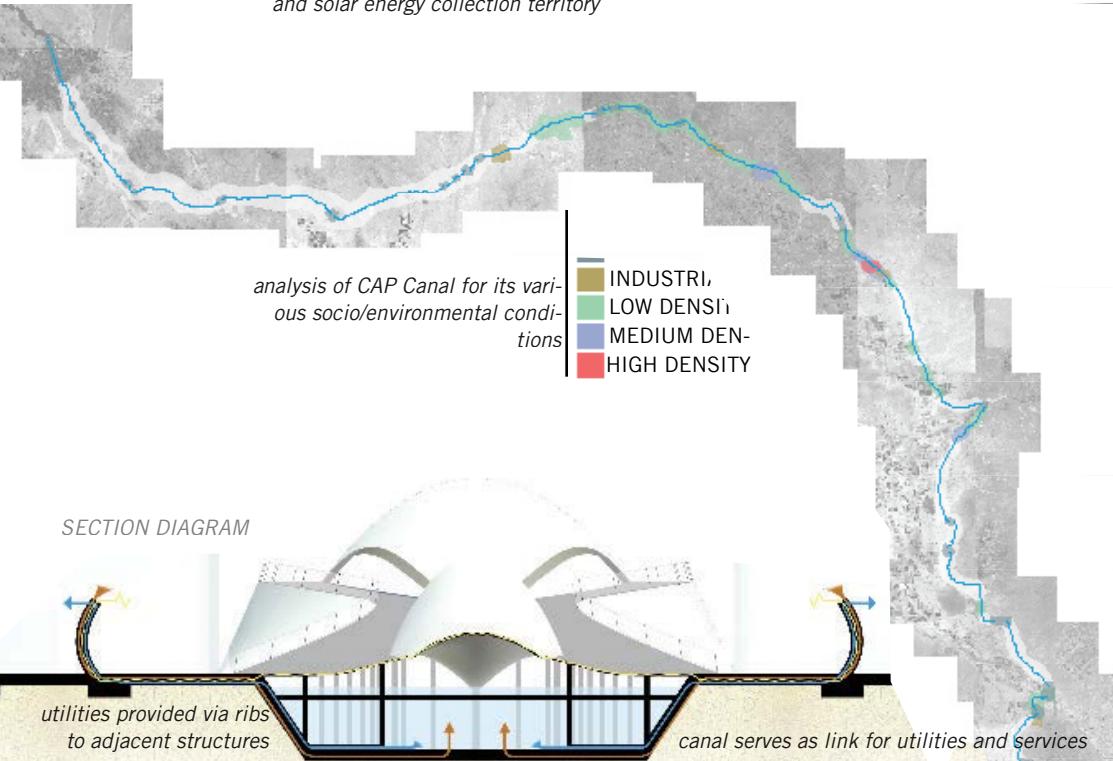
technology:  
use of building envelope system to insulate and maximize energy efficiency on minimal budget

# drylands

## DRYLANDS INSTITUTE URBAN DESIGN CHALLENGE UNIVERSITY OF CINCINNATI- CINCINNATI USA FALL 2011



taking as a site the 425-mile system of canals that stretches across Arizona from the Colorado river to Tucson, our four-student international design team proposal illustrates how the canal system can be used as a network of public parks and solar energy collection territory



# drylands

*digital modeling and representation in 4-person international design team*

*3D Studio Max, Rhino, Adobe CS3*

*competition adjudication pending*

**ROLE**

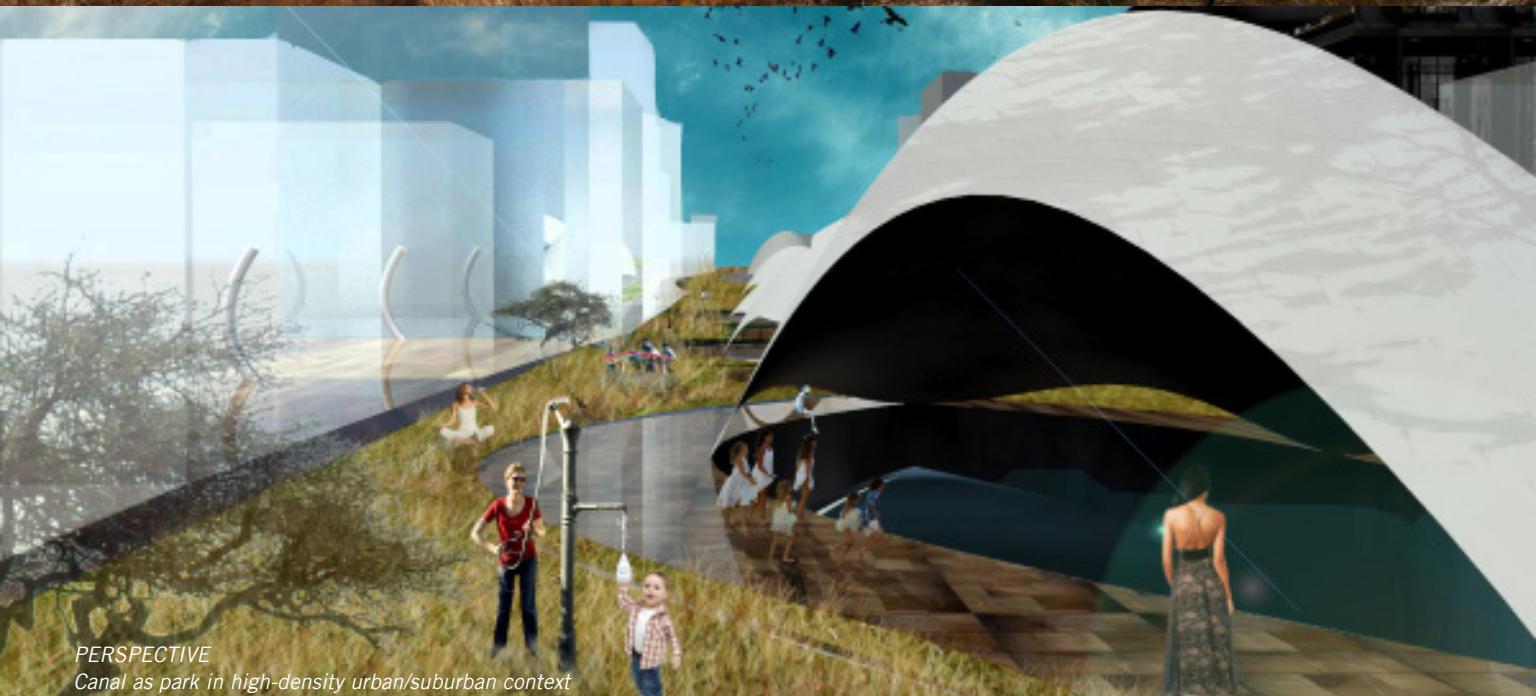
**METHOD**

**STATUS**



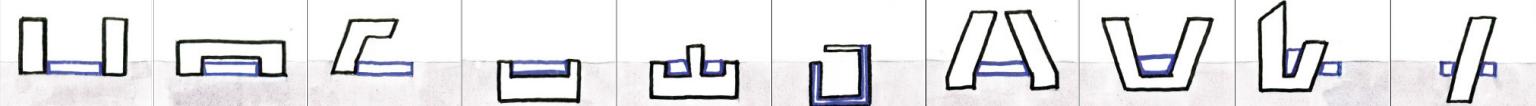
## PERSPECTIVE

*Canal as canal-cover and solar-energy catchment in low-density rural context*



## PERSPECTIVE

*Canal as park in high-density urban/suburban context*



near

over

atop

under

within

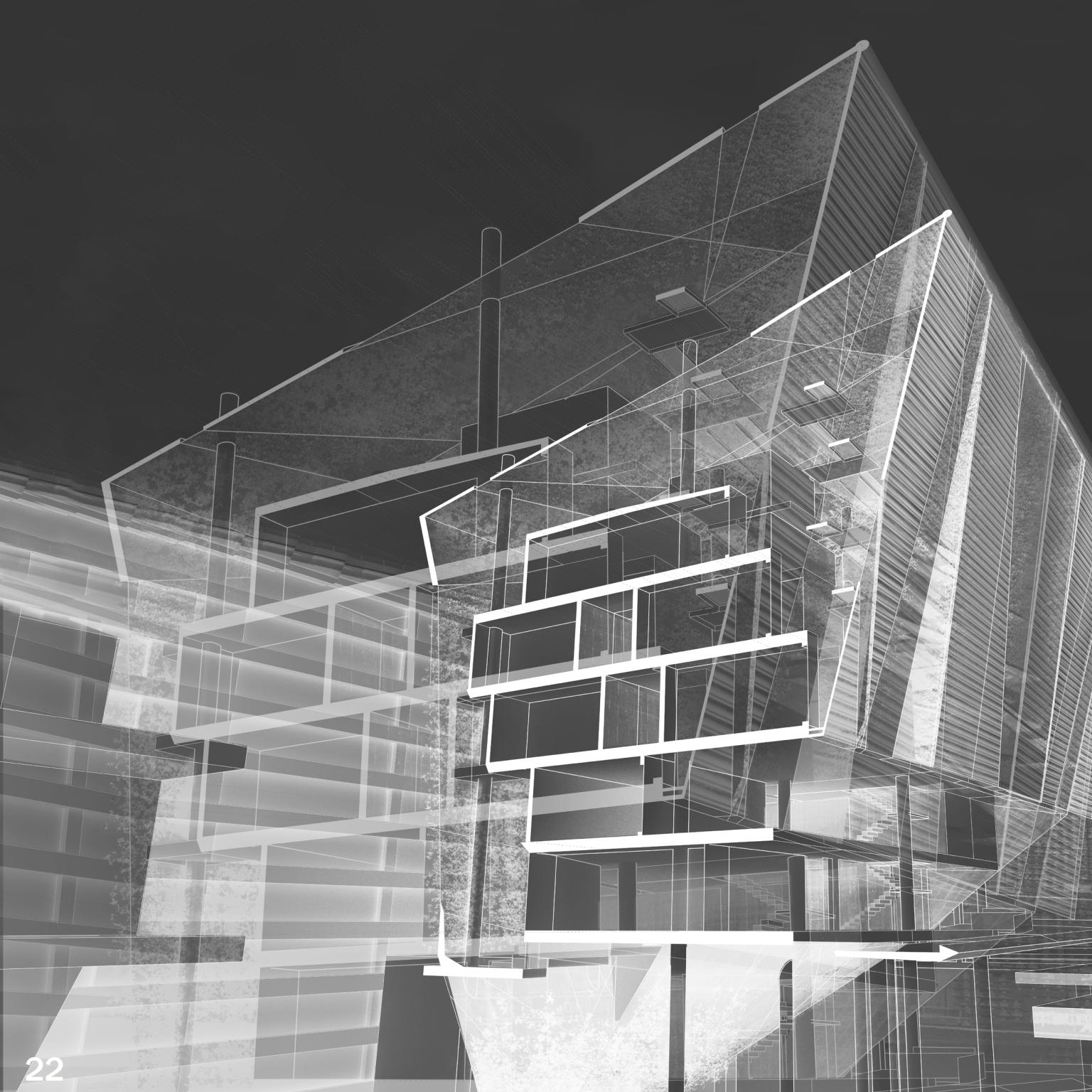
within

against

between

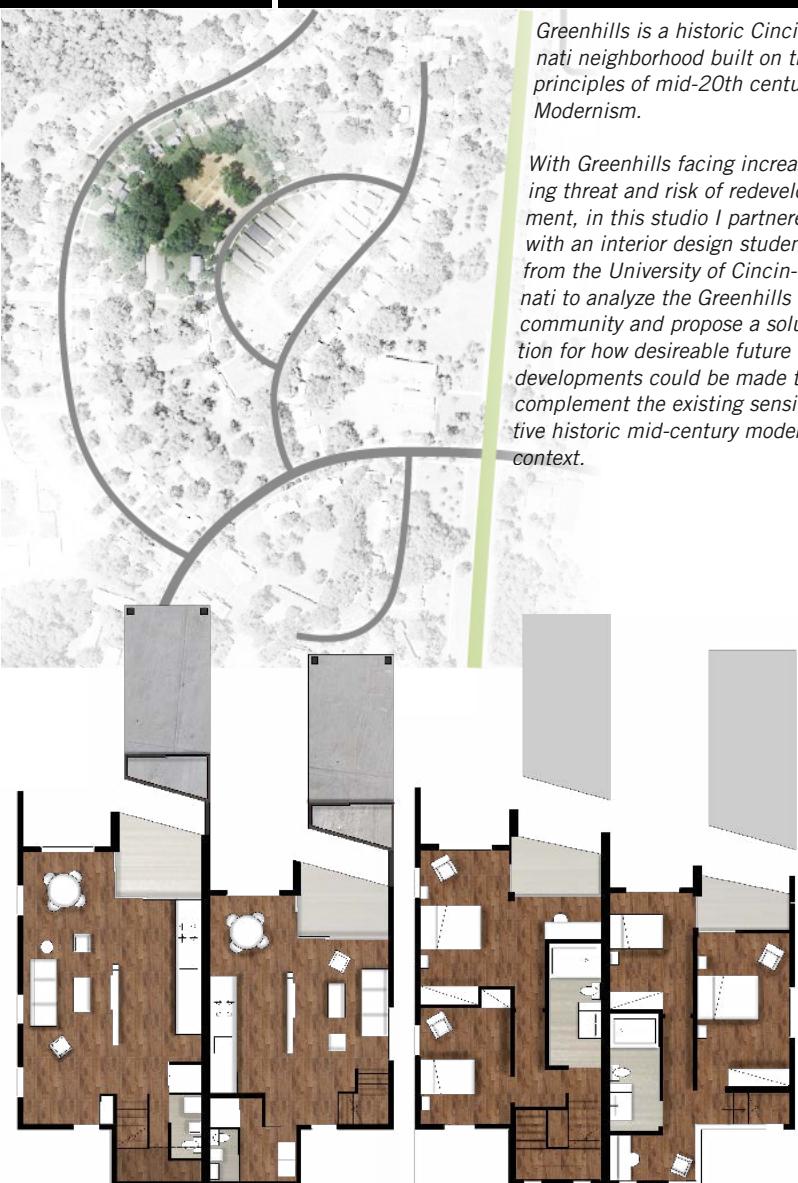
through

from



# ACADEMIC





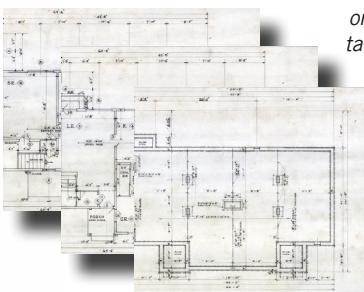
interior plans for redevelopment at Dewitt Court

*Greenhills is a historic Cincinnati neighborhood built on the principles of mid-20th century Modernism.*

*With Greenhills facing increasing threat and risk of redevelopment, in this studio I partnered with an interior design student from the University of Cincinnati to analyze the Greenhills community and propose a solution for how desirable future developments could be made to complement the existing sensitive historic mid-century modern context.*



*proposed redevelopment of the currently abandoned Dewitt Court*



*original plans for Dewitt Court taken into consideration during proposal of new structure*



# greenhills

architecture design development, partnership with University of Cincinnati Interior Design student  
hand-work, photography, GIS, CAD, Revit, Adobe CS3  
Greenhills community currently utilizing several recommendations to guide community redevelopment

ROLE  
METHOD  
STATUS



PERSPECTIVE: exterior rendering of proposed development at Dewitt Court



PERSPECTIVE: exterior rendering of proposed development at Dewitt Court

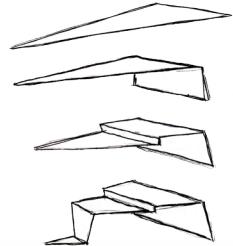


Dewitt elevation - illustrating "Green Belt" planter feature to unite all adjacent buildings

# literacy center

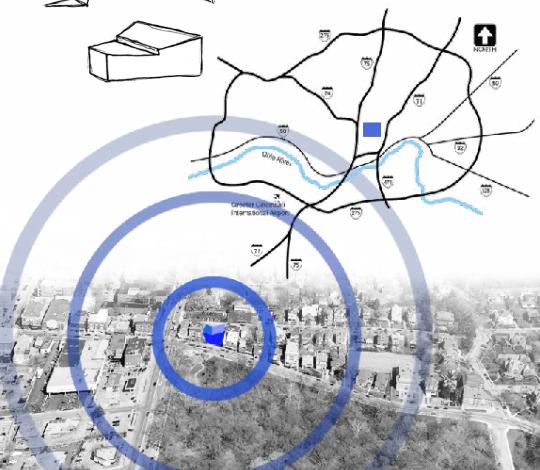
CINCINNATI COMMUNITY LITERARY CENTER  
UNIVERSITY OF CINCINNATI- CINCINNATI, USA  
FALL SUMMER 2009

## CINCINNATI COMMUNITY LITERARY CENTER



The CCLC, located in the heart of uptown Cincinnati, sits on an active patch of urban fabric.

This proposal illustrates how the existing urban fabric can be extruded and 'folded' to create a unique new urban community experience



entry floor, providing public access spaces for gathering, observing, studying, contemplating, and interacting



upper floor, providing technical and social resources for patrons, such as books and computers, as well as a resident visiting author

PERSPECTIVE: exterior view from Ludlow Ave, main entry



# literacy center

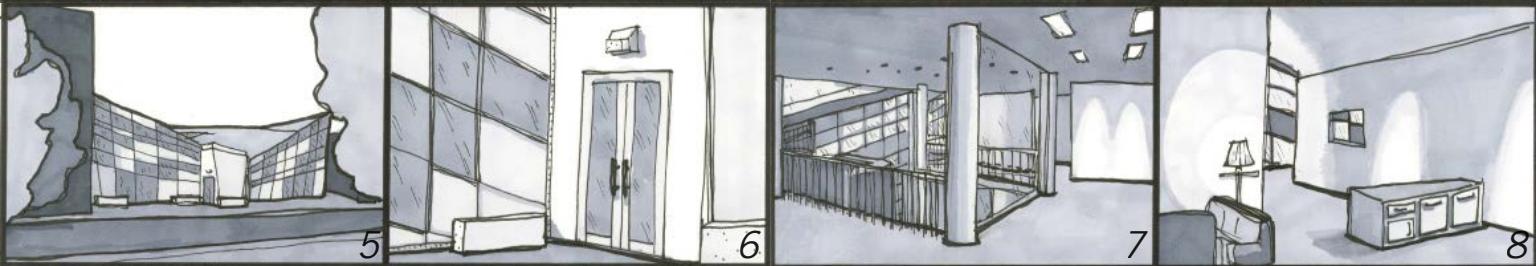
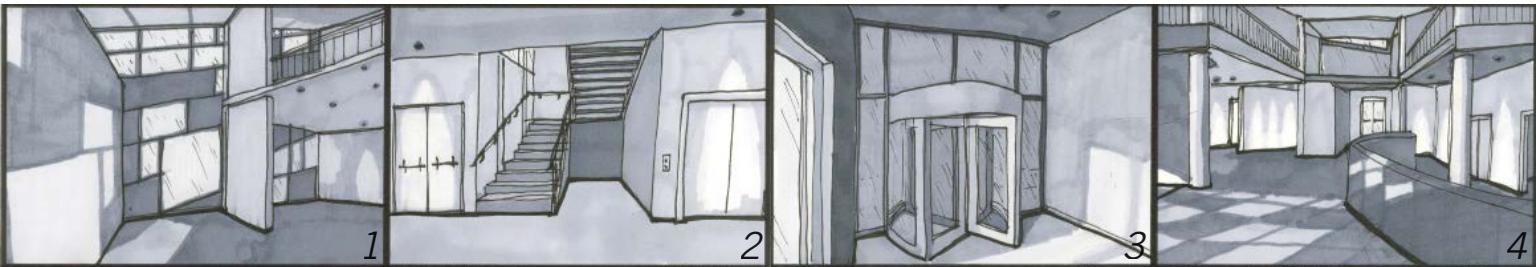
*individual work - analysis, development, and 2D/3D digital design realization  
historical analysis, photography, technical drawing, Revit, Adobe CS3  
project not physically realized; valuable spatial organization lessons learned*

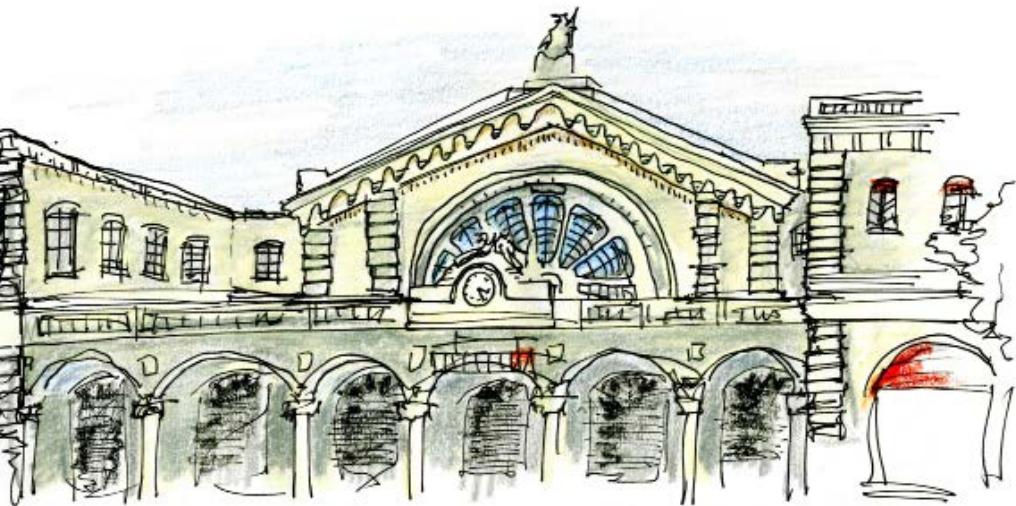
ROLE  
METHOD  
STATUS



ABOVE PERSPECTIVE: interior view of upper floor, as seen from east side of connective bridgeway

BELLOW PERSPECTIVE: Progression of movement through Literary Center

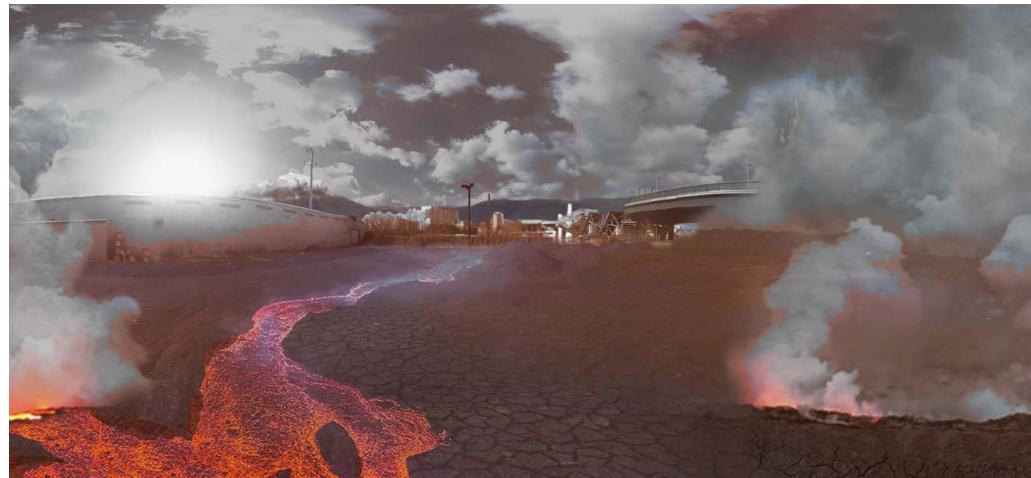




left: Francois Duquesnay's Gare de l'est, Paris France



opposite page right: map of travels through New York City



right: Elephant, Tanzania safari

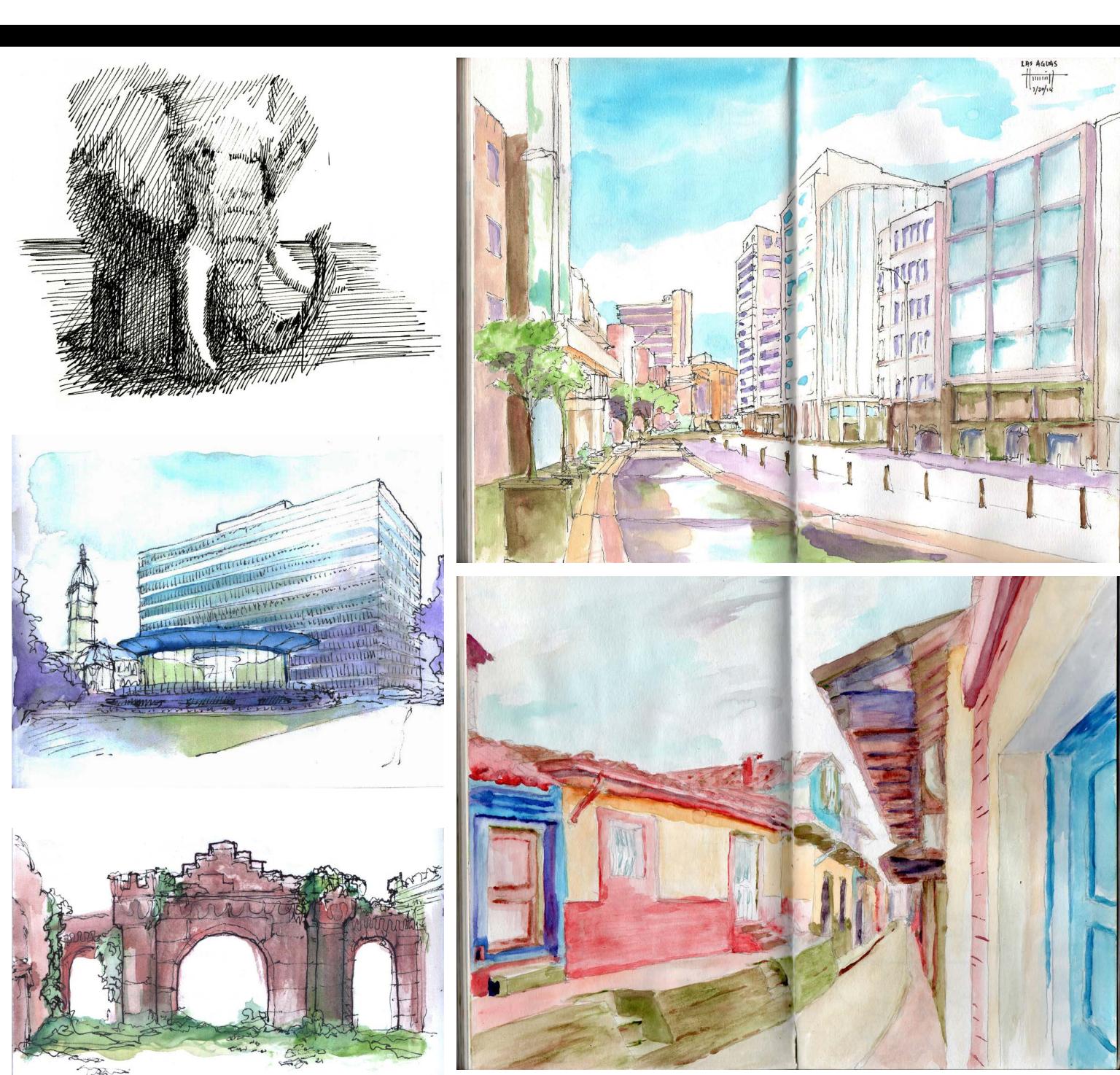


below rt: Fairmount Park Visitor Center and Mt. Moriah Cemetery gate (Philadelphia historical buildings)

far right: Las Aguas and Calle Funeral (Colombia street scenes)

below left: map of city creation series

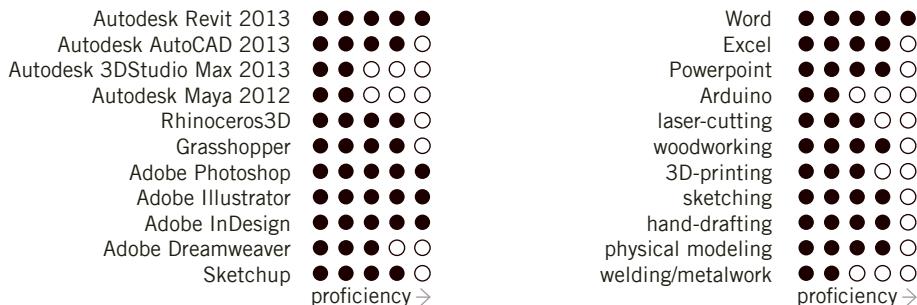
below: photoshopped extreme environmental conditions



e: nahammitt@gmail.com  
 a: 3901 Locust Walk MB #754, Philadelphia PA 19104  
 c: 513.373.3389

<b>education</b>	<b>University of Pennsylvania</b>  <b>University of Cincinnati</b>	Philadelphia, Pennsylvania   School of Design Dual Masters of Architecture and Historic Preservation   M.Arch+MSHP 2015 Cumulative GPA 3.7/4.0  Cincinnati, Ohio   College of Design, Architecture, Art, and Planning - School of Architecture and Interior Design   BS Architecture 2012 Cumulative GPA 3.75/4.0
<b>experience</b>	<b>Philadelphia Redevelopment Authority</b>  <b>GBBN Architects</b>  <b>Architecture for Humanity</b>  <b>DesignSpaceAfrica</b>  <b>SHP Leading Design</b>  <b>Frederic Schwartz</b>  <b>Riedel Design/Build</b>	<b>2013 January-Present   Philadelphia, Pennsylvania</b> Collaborative work-study internship with the City of Philadelphia to manage and oversee redevelopment of the city's 10,000 vacant properties. Worked with Guy Thigpen of the PRA and a team of PennDesign students to develop a hedonic model for pricing properties  <b>2012 January-March   Cincinnati, Ohio</b> Thorough material research, documentation, and rehabilitation of Cincinnati's 1878 Music Hall using extensive 3D laser scanning technologies and Building Information Modeling (BIM) systems. Collaboration with experienced Adaptive Reuse/Historic Preservation professionals and local Cultural Resource Management firms.  <b>2011 May-September   Cape Town, South Africa - Besongabang, Cameroon - Shirati, Tanzania</b> Managed physical models and presentations for two Football for Hope Centers in South Africa. Post-occupancy analysis and as-built documentation of health center in rural Tanzania.  <b>2011 July-September   Cape Town, South Africa</b> Coordinated two team projects - Yourstreet Urban Design initiative proposing improvements to Curry-prize-winning DesignIndaba 10x10 houses (significant collaboration with DSA urban planners and architects) and Nomakhaya upgrading of one woman's South African township creche for use as a healthy, safe daycare for 80+ Cape Town children.  <b>2011 January-March   Cincinnati, Ohio</b> Collaborative technical design development of 250,000sf public school facility in Beavercreek, Ohio. Significant exposure to design proces, mechanical/structural system management, and BIM modeling via collaborative use of Autodesk Revit Architecture/MEP.  <b>2010 June-September   New York, New York</b> Developed bid for Building Back Better Communities HaitiGreenHomes international humanitarian design competition entry. Collaborated with multinational design team in urban planning for communities in Senegal, Poland, and several locations in the Southern United States  <b>2008 June-August   Madeira, Ohio</b> Apprentice with experienced community carpenter in design-build of several custom residential interiors and build-outs.
<b>skills</b>	<b>Software Proficiency</b>  <b>Manual Proficiency</b>	Autodesk AutoCAD 2013, Autodesk Revit 2013, Autodesk Maya 2012, Autodesk 3D Studio Max, Adobe Photoshop, Illustrator, InDesign, and Dreamweaver CS6, Rhinoceros, Grasshopper Google Sketchup, Z310 3D printing Epilog 36EXT Laser-cutting, STL 3D software hand-drafting, sketching, physical modeling, technical drawing, MIG welding, ARC welding, woodwork advanced certification, metalwork advanced certification

## skills continued



leadership	University of Pennsylvania  University of Cincinnati	Graduate Assistant, PennDesign teaching Revit, Adobe Creative Suite, and Grasshopper Graduate Assistant, Rodin College House, coordinating intramural sports and variety of hall events  Alpha Rho Chi Professional Fraternity for Architecture and Allied Arts   Vice President American Institute of Architecture Students   Vice President Students for Ecological Design   Chair of Finances Catalyst and Leadershape, University of Cincinnati programs for leadership development
involvement	Triple Bottom Line  Honors	LEED GA accreditation following completion of academic course 2011 USGBC Young Professional Streetcar design competition   Runner-up 2010 USGBC Natural Talent Design Competition 2010   Honorable Mention Rebuilding Together Philadelphia   West Philadelphia, Pennsylvania Community Service “Into the Streets” Cru, Christian Fellowship  Cincinnatus Full Presidential Scholar University of Cincinnati Honors and Scholars Program University of Cincinnati Dean’s List 2008-2012 Speaker “How to share education through new digital media” 2011 National Association of Schools of Art and Design Convention, Retreat Coordinator, University of Cincinnati’s Honors and Scholars summer retreat
exposure	Lived in Travelled in Languages	Durban, South Africa   1992-2000 South Africa, Tanzania, Kenya, France, and Germany   2011 Great Britain and Italy   2009 Spanish (college exposure), Arabic (college classes), French (college exposure) Zulu, Afrikaans (childhood exposure), Latin (high school classes)